



Promoting Science-based Leatherback Conservation & Management and Capacity Building in the Western Pacific

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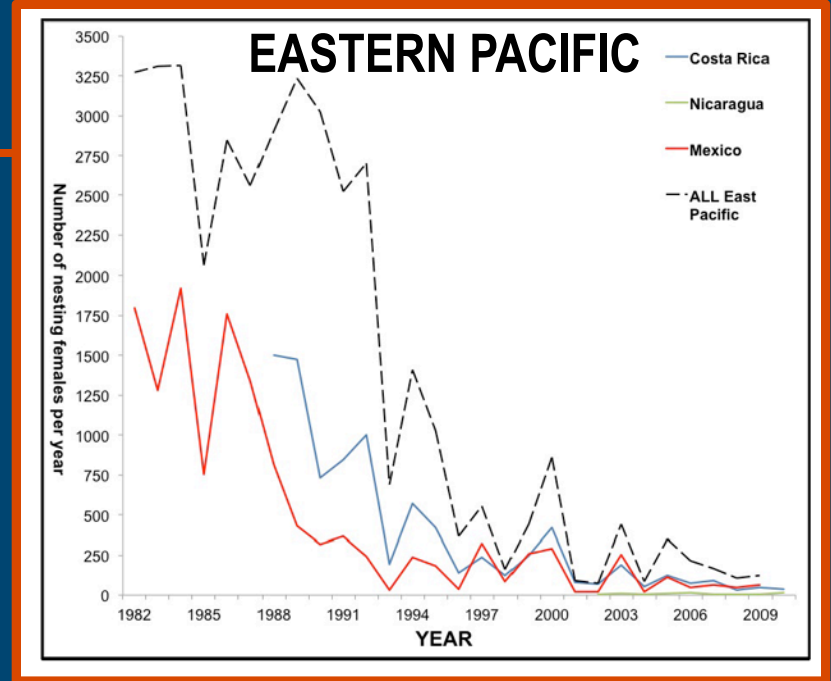
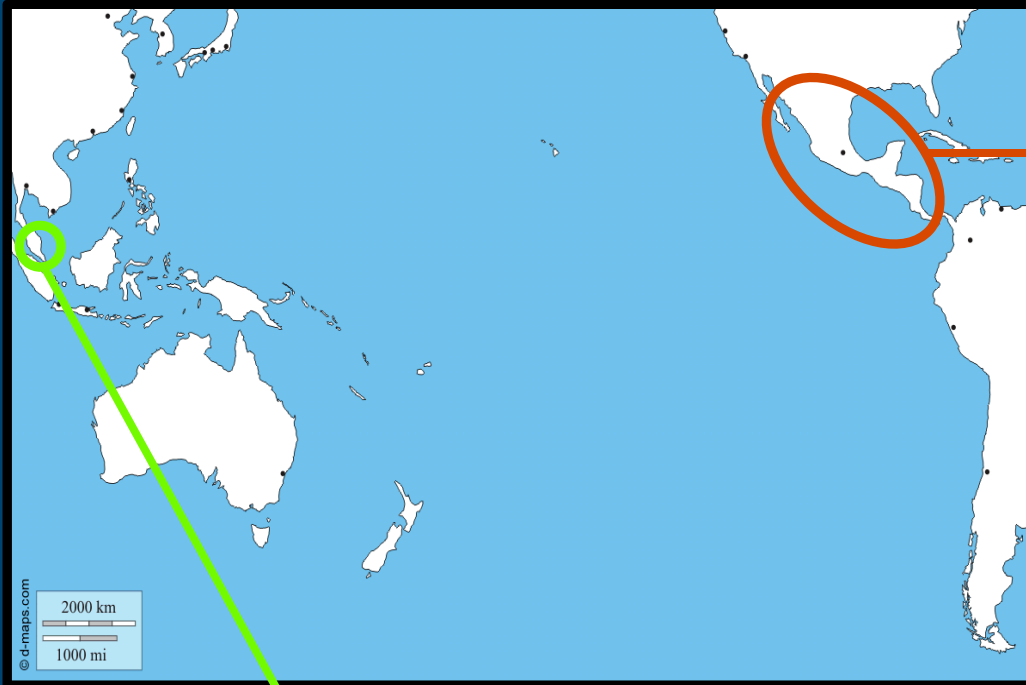
Review of NOAA Fisheries' Science on Marine Mammals & Turtles

Southwest and Northwest Fisheries Science Centers

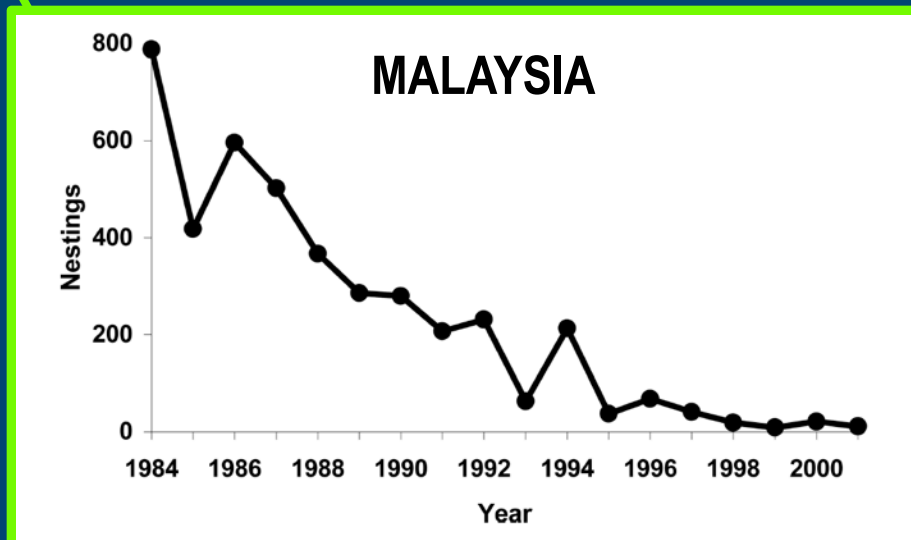
27-31 July 2015

La Jolla, CA

Decline in Pacific Leatherbacks > 90%

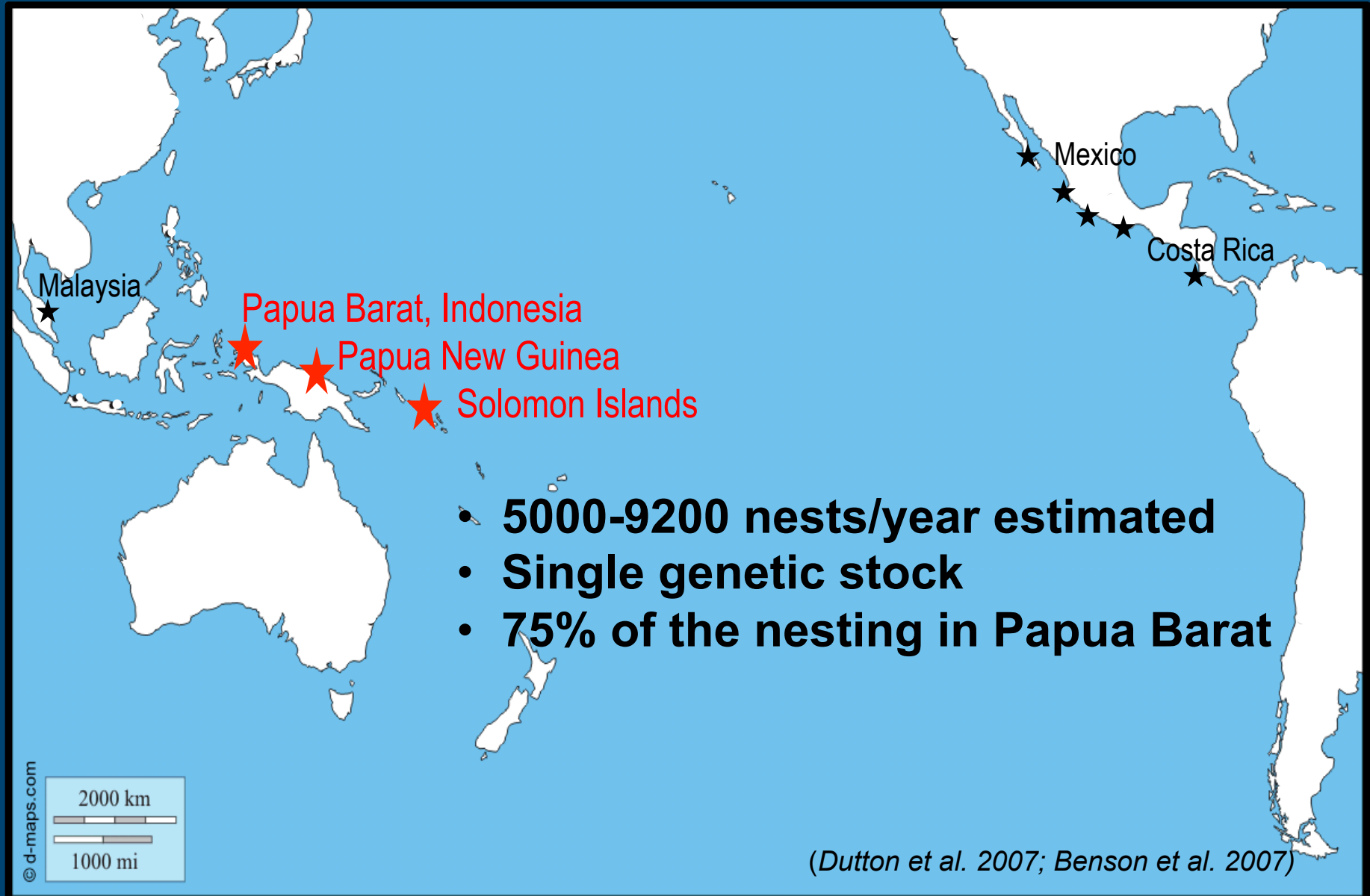


Eastern Pacific Leatherback Action Plan 2012



Chan 2006

However...



Papua Barat, Indonesia:

Jamursba-Medi (18 km) & Wermon (6 km) are the largest strongholds for leatherbacks in the Pacific

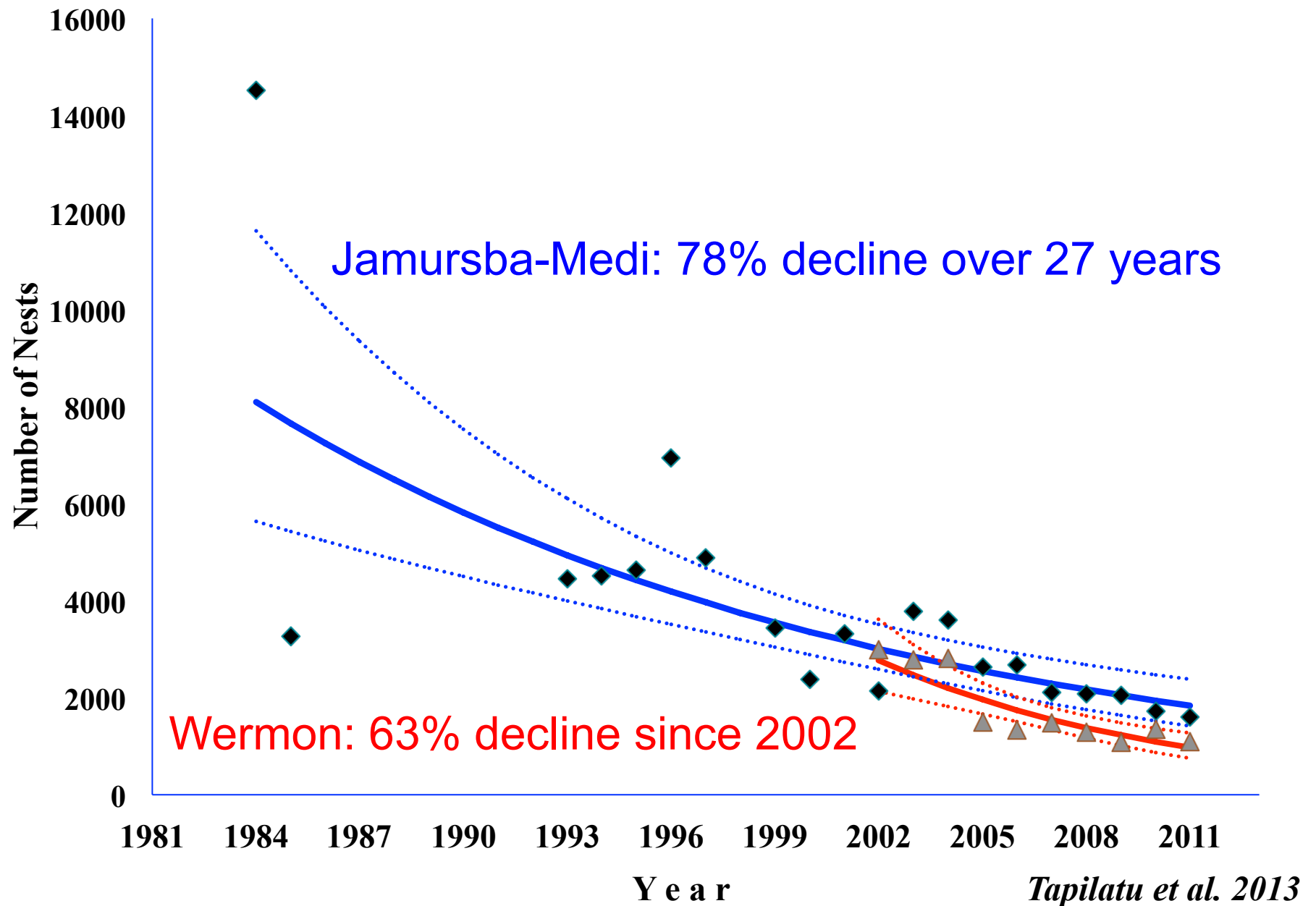
NOAA's involvement:

- 1999: Collaboration established between SWFSC and WWF-Indonesia
- 2001: US signed the IOSEA Memorandum of Understanding
- 2003; 2007: Bellagio Initiative for Pacific Leatherbacks
- 2005-present: SWFSC Scientific and Technical Advisor to UNIPA

Photo: R. Tapilatu



Decline in Nesting Abundance



Management and Conservation Plan

Nesting Beach Management

- Monitoring population trend
- Boosting hatchling production
- Defining high & low risk zones

Community-based Conservation

- Community involvement
- Community benefits
- Local ownership

Local & Central government support



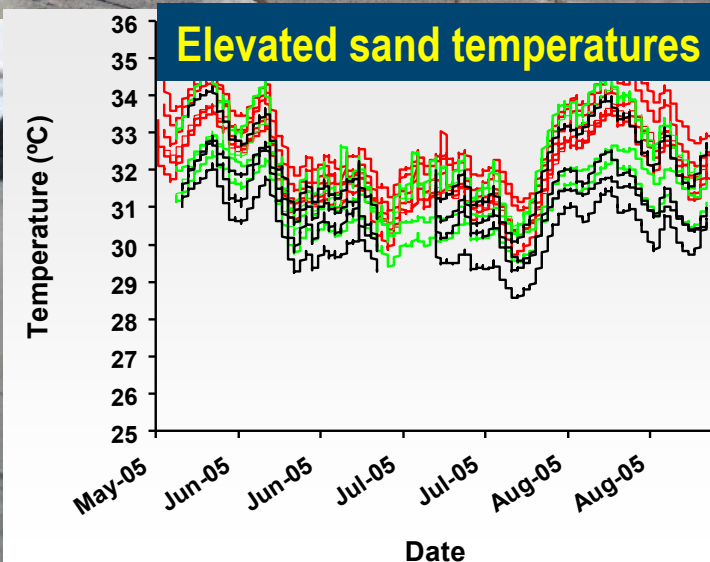
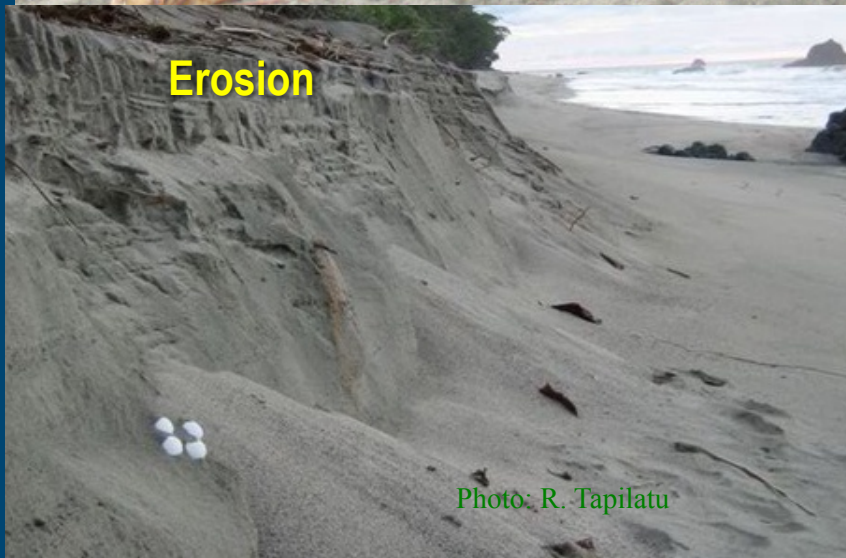
❖ Daily beach monitoring

- Nest counts to monitor the population trend
- Tagging of females: > 1,300 females PIT tagged since 2003



❖ Increasing hatchling production – every hatchling counts!

- Experimental plots to quantify threats



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RESULTS:

- Mean hatching success *in situ*: 20% - 54%
- Mean hatching success in hatcheries: 56% - 83%
- Spatial/temporal variation in major threats: predation, erosion/inundation, sand temperature



Identification of high and low risk areas for nest mortality

❖ Increasing hatchling production – every hatchling counts!

- Conservation measures implemented:

Hatcheries



Nest shading



Nest protection



Traditional pig traps



Relocation of “doomed” nests

❖ Community-based conservation: 3 villages (index-beaches)

- Socio-economic research
(Gjertsen and Pakiding 2012; Gjertsen et al. 2014)
- Successful community program → conservation village
 - Organic gardening, chicken farming
 - Agriculture, meat processing
 - Financial management training
 - Turtle camps for children/education/hygiene
 - Garbage disposal



❖ Non-index beaches

- Leatherback meat and eggs on sale at the market
- Other sea turtle species for sale
- Billboards highlighting the protection of turtles
- Training workshop for law enforcement personnel
- Education and outreach in neighboring villages



❖ Training in sea turtle biology & field techniques

- Workshop: Communities, UNIPA, government, WWF
- Sea turtle training course (e.g., in Trinidad)
- Graduate students



Holistic approach needed that extends beyond the nesting beach...

